



Department of
Environmental Protection
Bureau of Land & Water Quality July.2000

O&M Newsletter

A monthly newsletter for wastewater discharge licensees,
treatment facility operators and associated persons

**TRI-STATE PRETREATMENT
CONFERENCE
NHDES – JUNE 15, 2000**

On Thursday, June 15th Ken Jones & I drove down to Concord, NH to the second annual Tri-State conference. It was a long day for some but more than worth the effort. In attendance were 13 from Maine. The conference is open to any that want to learn more about the National Pretreatment Program and how to effectively manage commercial and industrial dischargers into Publicly Owned Treatment Works. Plan on joining us next year!

Attendance – EPA, NHDES, MDEP, MWRA, Cadmus Group, and numerous Pretreatment Coordinators from treatment facilities in the three states --- about 80 people in all.

The agenda included EPA and State Updates, Breakout sessions on Mercury, Local Limits, Sewer Use Ordinances, ISO 14001, Sludge Regs, Nutrient Discharge Limits and a Question and Answer period at the end. An excellent day of sharing information, meeting and talking with people from 'away', and getting (mostly straight) answers from the EPA!

Jim Rogers

Spring Exam Statistics

The following are the pass/fail rates for the Spring 2000 exam

Grade	Pass/Fail	Percent passed
1PC	2/0	100.0%
1B	11/7	61.1%
2B	6/10	37.5%
3B	14/11	56.0%
4B	4/9	30.8%
5B	6/16	27.3%

**EPA DMR QA Study # 20
Update.**

As indicated in previous O&M Newsletters, study updates will appear in the news every month as a reminder of immediate, upcoming deadlines.

So far:

- **June 5, 2000:** By this date chemistry QA samples should have been ordered from the NIST approved provider lab[s] of the participant's choice. Toxicity wet test samples should have been ordered from NERL. Note: Some flexibility was given by the EPA on this deadline, because the time period between

when participants received the initial study announcement and the date samples were to be ordered was fairly short. However, samples should have been ordered some time ago by now, so please contact me if they were not.

Coming up:

- **July 14:** Estimated toxicity wet test sample shipment date.
- **Two weeks before the deadline set by each provider lab** for the permittee sample results report back to them, but **no later than August 29:** The chemistry and toxicity results are to be sent by the labs **to the permittees.** Toxicity results are also to be sent to NERL [for use in setting limits].
- **Deadline set by each provider lab, but no later than September 15:** Permittees are to send chemistry test results data back to the NIST provider lab[s] for evaluation. This is also the deadline for permittees to send wet testing results data to NERL for evaluation. Copies of both of these are to be sent to the state coordinator.

If you have any questions, please refer to the original study announcement packet for detailed instructions or call me at 287-7659.

David Dodge

For Practice

1. Which of the following types of sludge thickening devices costs least to operate?
 - a. Dissolved Air Flotation
 - b. Gravity Thickener
 - c. Aerobic Digester
 - d. Anaerobic Digester
2. If there is a constant flow and BOD loading coming into the treatment facility and the RAS concentration does not change, what will happen if the RAS rate is increased?
 - a. The MLSS concentration will increase.
 - b. The F/M ratio will increase
 - c. The OUR Rate will decrease
 - d. The possibility for denitrification will decrease.
3. A circular clarifier with a diameter of 50 feet and a sidewall depth of 12 feet receives a flow of 2 MGD with a MLSS concentration of 2400 mg/l. What is the solids loading on the clarifier?
 - a. 10.9 lb/day/sq.ft.
 - b. 12.7 lb/day/sq.ft.
 - c. 18.6 lb/day/sq.ft.
 - d. 20.4 lb/day/sq.ft.
4. The most important part of a good safety program at a wastewater treatment plant is.
 - a. A written safety plan
 - b. Quarterly safety meetings
 - c. Developing a proper attitude toward safety by all employees
 - d. Providing all necessary PPE for employees.

Fall 2000 Exam

The fall 2000 Wastewater Operator Certification Exam will be given on

Wednesday -- November 15, 2000 in the usual locations, South Portland, Bangor and Presque Isle. Applications **must** be submitted to us by September 29, 2000. Applications can be obtained by contacting Leslie Rucker at 287-9031 or by writing to: Wastewater Operator Certification Program, Maine Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017.

Dick Darling

UPCOMING TRAINING COURSES

August 14, 2000 in Lincoln, ME, Instrumentation Control – approved for 6 hours, sponsored by Maine Rural Water Association (207) 729-6569

August 15, 2000 in East Vassalboro, ME, Instrumentation Control – approved for 6 hours, sponsored by Maine Rural Water Association (207) 729-6569

August 16, 2000 in Topsham, ME, Instrumentation Control – approved for 6 hours, sponsored by Maine Rural Water Association (207) 729-6569

September 12, 2000 in Norway, ME, Line Location and Leak Detection – approved for 4 hours, sponsored by Maine Rural Water Association (207) 729-6569

September 13, 2000 in South Berwick, ME, Line Location and Leak Detection – approved for 4 hours, sponsored by Maine Rural Water Association (207) 729-6569

October 4 & 5, 2000 in Presque Isle, ME, North Country Convention – various training approved for up to 12 hours, sponsored by JETCC (207) 767-2649

Answers to *For Practice*:

1. b. A gravity thickener is the cheapest sludge conditioning device because it requires minimal energy to run.
2. a. The Mixed Liquor Suspended Solids concentration will increase. If more sludge is brought back from the clarifier and mixed with a constant volume of influent, the MLSS must increase.
3. d. The Solids Loading is a measure of the mass of solids distributed over the surface of the clarifier per day.
The area of the clarifier = $50 \times 50 \times 0.785 = 1962.5$ sq. ft.
The solids loading = $2.0 \text{ MGD} \times 2400 \text{ mg/L} \times 8.34 = 40,032$ lb/day
The solids loading = $40,032 \text{ lb/day} / 1962.5 \text{ sq. ft.} = 20.4$ lb/day/sq.ft.
4. c. The most important part of any safety program is to make sure that all employees have a good attitude toward safety so that they always make sure that they themselves and their co-workers work safely all the time.

**Southern Maine Technical
Colleges Pollution Abatement
Technology program Needs
Students.**

In the last few years there has been a low turnout of students for the Pollution Abatement Technology Program. Many of our veteran wastewater treatment operators are nearing retirement, and new, well-educated operators are needed to replace them. As wastewater treatment becomes more and more sophisticated, and treatment requirements become more and more stringent, a good operator-training program becomes vital.

Our students come from many varied backgrounds and can be recent high school graduates, persons seeking a new career, military veterans, etc.. Southern Maine Technical College's (SMTC's) Pollution Abatement (Water Quality) program can prepare individuals and gives them a career field that offers chances for advancement, challenges and satisfaction knowing they are doing something for the environment.

Due to 1996 rule changes of the Federal Safe Drinking Water Act, starting in January 2001, Maine alone will be required to have an additional 600 licensed water treatment plant operators in the State. The Water Quality program will help prepare individuals to pass either the Maine Department of Environmental Protection Wastewater treatment Plant Operator certification exam or the Department of Human Services Drinking Water Treatment Plant Operators certification exam. This will allow these individuals to become

qualified for many wastewater and drinking water operator jobs now open or soon to open.

In addition, this program prepares individuals to qualify to set for various New England States' Wastewater Treatment Plant Operator certifications, Physical Chemical Treatment Plant Operator certifications and the New England Water Environmental Association's Collection System and Laboratory certification exams.

For more information please contact:

Anthony L. Gordon,
SMTC
Fort Road
South Portland, Maine 04106
Telephone 1-207-767-9583

or the

SMTC Admissions Office
Telephone 1-207-767-9520